STUDIES IN THE EUPATORIEAE (ASTERACEAE) LXXX.

A NEW GENUS, FLYRIELLA.

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A new genus is established for a group of species of northern Mexico and the adjacent United States that were among the many originally placed in Eupatorium. The study of one of the species of the group by the late David Flyr pointed out the closer relationship to the genus Brickellia. We have examined the possibility of a broader genus concept of Brickellia as suggested by Flyr and find it untenable, but very natural generic groupings have been noted that preserve very nearly the original concept of Brickellia. In this treatment the species studied by Flyr falls into a new genus and it seems appropiate to name the group after him.

The genus Flyriella is similar to Brickellia and different from Eupatorium in the features mentioned by Flyr, the narrow corolla with short rather erect lobes and the narrow greenish phyllaries in many rows. A similarity to Brickellia not noted previously is the hirsute node at the base of the style which, however, differs in details of structure from that of Brickellia. Flyriella is one of the segregates of Brickellia that differs by having only 5 ribs on the achene. A unique feature of the new genus is the contorted carpopodium with distorted cells and only partially thickened walls. Additional distinctions of Flyriella are the lack of the characteristic fringed pappus setae found in all species of Brickellia, and the more spreading more sparse setae on the achenes.

In reviewing the species in the group we have noted that Eupatorium chrysostyloides B.L.Robinson is apparently the same as the earlier described Eupatorium leonense B.L.Robinson. We describe as new a species found named as E. stanfordii among the collections in the Gray Herbarium. Unfortunately, we

do not know who to credit with this notation.

Flyriella R.M.King & H.Robinson, genus novum Asteracearum (Eupatorieae). Plantae herbaceae vel suffrutescentes erectae vel decumbentes e basi multo ramosae, dense hirsutae. Folia plerumque opposita distincte petiolata, petiolis interdum alatis, laminis ovatis vel deltoideis acutis basi truncatis vel

subcordatis margine serratis. Inflorescentiae laxe ramosae, ramis cymosis. Involucri squamae ca. 30 subimbricatae valde inaequilongae ca. 3-seriatae plerumque lanceolatae; receptacula plana glabra. Flores 10-30 in capitulo; corollae tubulares vel anguste infundibulares 5-lobatae, lobis brevibus vix longioribus quam latioribus vel angustioribus, laevibus, extus pauce glanduliferis interdum breviter setiferis; filamenta antherarum in parte superiore anguste, cellulis plerumque breviter oblongis, parietibus infirme transverse annulate ornatis, appendicibus parum longioribus quam latioribus; styli inferne leniter nodulosi dense hirsuti; appendicibus longe clavatis laevibus; achaenia 5-costata setifera inferne interdum glabra; carpopodia distincta asymmetrica brevia vel longe cylindrica, cellulis varie contortis, parietibus distincte aequaliter incrassatis; pappus setiformis uniseriatus, setis 20-40 scabris superne sensim angustioribus, cellulis apicalibus subacutis.

Species typica: Eupatorium parryi A. Gray

The five species of $\underline{\text{Flyriella}}$ can be distinguished by the following key.

- Stems with short crisped pubescence; achenes with setae only in upper part <u>F</u>. <u>leonensis</u>
- Stems long hirsute; achenes with setae not restricted to upper part
 - Heads with ca. 11 flowers, pappus with ca. 20 setae

 F. sphenopoda
 - Heads with 15-25 flowers, pappus with 25-30 setae
- Corollas narrowly funnelform; carpopodia shortturbinate <u>F. stanfordii</u>
- Corollas tubular and constricted above; carpopodia elongate and contorted
 - 4. Heads in lax cymes, with 15-20 flowers per head; stems short-hirsute \underline{F} . parryi
 - 4. Heads in dense cymes, with ca 30 flowers per head; stems very densely long-hirsute F. chrysostyla

Our studies of the genus indicate that it contains the following five species.

- Flyriella chrysostyla (B.L.Robinson) R.M.King & H.
 Robinson, comb. nov. Eupatorium chrysostylum B.L.
 Robinson, Proc. Amer. Acad. 41: 274. 1905.
 Northern Mexico.
- Flyriella leonensis (B.L.Robinson) R.M.King & H. Robinson, comb. nov. Eupatorium leonense B.L.Robinson, Proc. Amer. Acad. 36: 479. 1901. Northern Mexico.
- Flyriella parryi (A.Gray) R.M.King & H.Robinson, comb.
 nov. Eupatorium parryi A.Gray in Torr. Bot. Mex.
 Bound. 75. 1859. Southern Texas, Northern Mexico.
- Flyriella sphenopoda (B.L.Robinson) R.M.King & H. Robinson, comb. nov. Eupatorium sphenopodum B.L. Robinson, Proc. Amer. Acad. 43: 35. 1907. N. Mexico.

Flyriella stanfordii R.M.King & H.Robinson, sp. nov.

Plantae herbaceae? Caules dense longe hirsuti.
Folia superiora alterna, petiolis 1.5 - 4.0 cm longis anguste alatis fere ad basim, laminis late ovatis 4.0 - 12.0 longis 3.0 - 9.5 cm latis breviter acuminatis serratis utrinque parce pilosis subtus in nervis hirsutis. Infloresentiae dense cymosae, pedicellis 2 - 7 mm longis hirsutis glanduliferis. Capitula ca.8 mm alta, floribus ca. 20 - 23; involucri squamae ca. 25 ca. 3-seriatae exteriores ovatae interiores lanceolatae; corollae albae anguste infundibulares ca. 5 mm longae, lobis vix longioribus quam latioribus extus pauce glanduliferis; achaenia sparse setifera, inferne vix angustiora carpopodia brevia turbinata; pappi setae ca. 40. Grana pollinis 25µ in diam.

MEXICO: Tamaulipas: 4 kms. west of Miquihauana in canyon with luxuriant vegetation. Flowers white. August 4, 1941. L.R.Stanford, K.L.Retherford, R.D. Northcraft 675 (Holotype GH!)

Reference

Flyr, David. 1968. New names and records in <u>Brickellia</u> (Compositae). Sida 3(4): 252-256.

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